

WHAT IS CLAIMED IS:

1. An indwelling stent formed in a substantially tubular shape, having a diameter allowing for insertion into a living organism and expandable when radially outward forces are exerted thereon from the  
5 inside of the tubular shape, wherein said stent comprises annular units arranged in an axial direction of said stent, each of said annular units comprises a plurality of collapsed annular elements so arranged as to surround the stent axis, each of said annular elements is elongate in the axial direction of said stent and has an opening in a central portion  
10 thereof, adjacent portions of said annular elements are joined to each other through a joint, adjacent annular units being interconnected at their joints by at least one link, said annular elements in each said annular unit are so arranged that one of each adjacent pair of said annular elements is located on the proximal end side in the axial  
15 direction of said stent, end portions of each said annular unit are projected zigzag, said zigzag projected end portion of said annular unit is in the state of penetrating into the adjacent annular unit, and said joints in each said annular unit are substantially parallel to the stent axis.
- 20 2. The indwelling stent according to claim 1, which comprises at least two annular units in the axial direction thereof.
3. The indwelling stent according to claim 1, wherein said annular unit comprises at least four annular elements.
4. The indwelling stent according to claim 1, wherein said link  
25 is substantially parallel to stent axis.
5. The indwelling stent according to claim 1, further comprising a radiopaque material-made marker.
6. The indwelling stent according to claim 1, wherein two or  
more said links are provided between an adjacent pair of said annular  
30 units.

7. The indwelling stent according to claim 1, wherein each said link is so disposed as not to be continuous with the adjacent link.

8. The indwelling according to claim 1, wherein said annular elements are aligned substantially rectilinearly with respect to the axial 5 direction of said stent.

9. The indwelling stent according to claim 1, wherein said annular elements are not aligned substantially rectilinearly with respect to the axial direction of said stent.

10. The indwelling stent according to claim 1, wherein an end portion, located on the outer side, of each of said annular elements located at both ends of said stent is roughly semi-elliptic in shape.

11. The indwelling stent according to claim 1, which has been produced with a predetermined outside diameter by use of a plastically deformable material-made pipe and then reduced in diameter by compressing from outside. 15

12. A living organ dilator comprising a tubular shaft main body, a foldable and expandable balloon provided at a distal end portion of said shaft main body, and a stent so mounted as to envelop said balloon in a folded state and expandable by expanding said balloon, 20

wherein said stent is an indwelling stent formed in a substantially tubular shape, having a diameter allowing for insertion into a living organism and expandable when radially outward forces are exerted thereon from the inside of the tubular shape, and said stent 25 comprises annular units arranged in an axial direction of said stent, each of said annular units comprises a plurality of collapsed annular elements so arranged as to surround the stent axis, each of said annular elements is elongate in the axial direction of said stent and has an opening in a central portion thereof, adjacent portions of said 30 annular elements are joined to each other through a joint, adjacent

annular units being interconnected at their joints by at least one link, said annular elements in each said annular unit are so arranged that one of each adjacent pair of said annular elements is located on the proximal end side in the axial direction of said stent, end portions of 5 each said annular unit are projected zigzag, said zigzag projected end portion of said annular unit is in the state of penetrating into the adjacent annular unit, and said joints in each said annular unit are substantially parallel to the stent axis.

13. The living organ dilator according to claim 12, wherein 10 said stent has been produced with a predetermined outside diameter by use of a plastically deformable material-made pipe, then said balloon has been disposed inside said stent, and thereafter said stent has been reduced in diameter by compressing from outside so as to mount said stent on said balloon.

15 14. The living organ dilator according to claim 12, wherein said annular unit of said stent comprises at least four annular elements.

15. The living organ dilator according to claim 12, wherein said link of said stent is substantially parallel to the stent axis.

16. The living organ dilator according to claim 12, wherein 20 said stent has a radiopaque material-made marker.

17. The living organ dilator according to claim 12, wherein each said link of said stent is so disposed as not to be continuous with the adjacent link.